CLAIMS

What is claimed is:

1. An apparatus for electrically testing a microelectronic product comprising:

an electrical test head to which is mated a microelectronic product for electrically testing the microelectronic product; and

a movable electrical probe tip positioned with respect to the electrical test head such as to electrically stress a portion of the microelectronic product other than an electrical contact portion of the microelectronic product.

2. The apparatus of claim 1 wherein the microelectronic product is a semiconductor product.

3. The apparatus of claim 1 wherein the microelectronic product is a ceramic substrate product.

4. The apparatus of claim 1 wherein the microelectronic product is an optoelectronic product.

5. The apparatus of claim 1 further comprising a controller which:

controls the electrical probe tip positioning and biasing with respect to the portion of the microelectronic product other than the electrical contact portion of the microelectronic product; and

simultaneously collects corresponding electrical test data from the microelectronic product.

6. The apparatus of claim 1 further comprising a radiation beam source positioned with respect to the electrical probe tip such as to simultaneously radiation stress the portion of the microelectronic product other than the electrical contact portion of the microelectronic product.

7. The apparatus of claim 6 wherein the electrical probe tip and the radiation beam source are on the same side of the microelectronic product.

8. The apparatus of claim 6 wherein the electrical probe tip and the radiation beam source are on opposite sides of the microelectronic product.

9. A method for electrically testing a microelectronic product comprising:

providing an electrical test apparatus comprising:

an electrical test head to which is mated a microelectronic product for electrically testing the microelectronic product; and

a movable electrical probe tip positioned with respect to the electrical test head such as to electrically stress a portion of the microelectronic product other than an electrical contact portion of the microelectronic product; and

sequentially movably positioning the electrical probe tip and electrically biasing the microelectronic product while simultaneously electrically testing the microelectronic product.

10. The method of claim 9 wherein the microelectronic product is a selected from the group consisting of a semiconductor product and a ceramic substrate product.

11. The method of claim 9 wherein the microelectronic product is an optoelectronic product.

12. The method of claim 9 further comprising providing a controller which:

controls the electrical probe tip positioning and biasing with respect to the portion of the microelectronic product other than the electrical contact portion of the microelectronic product; and

simultaneously collects corresponding electrical test data from the microelectronic product.

13. The method of claim 9 further comprising providing a radiation beam source positioned with respect to the electrical probe tip such as to simultaneously radiation stress the portion of the microelectronic product other than the electrical contact portion of the microelectronic product.

14. The method of claim 13 wherein the electrical probe tip and the radiation beam source are on the same side of the microelectronic product.

15. The method of claim 13 wherein the electrical probe tip and the radiation beam source are on opposite sides of the microelectronic product.

16. A method for electrically testing a semiconductor product comprising:

providing an electrical test apparatus comprising:

an electrical test head to which is mated a semiconductor product for electrically testing the semiconductor product; and

a movable electrical probe tip positioned with respect to the electrical test head such as to electrically stress a portion of the semiconductor product other than an electrical contact portion of the semiconductor product; and

sequentially movably positioning the electrical probe tip and electrically biasing the semiconductor product while simultaneously electrically testing the semiconductor product.

17. The method of claim 16 further comprising providing a controller which:

controls the electrical probe tip positioning and biasing with respect to the portion of the semiconductor product other than the electrical contact portion of the semiconductor product; and

simultaneously collects corresponding electrical test data from the semiconductor product.

18. The method of claim 16 further comprising providing a radiation beam source positioned with respect to the electrical probe tip such as to simultaneously radiation stress the portion of the semiconductor product other than the electrical contact portion of the semiconductor product.

19. The method of claim 16 wherein the electrical probe tip and the radiation beam source are on the same side of the microelectronic product.

20. The method of claim 16 wherein the electrical probe tip and the radiation beam source are on opposite sides of the microelectronic product.